INDEX TO SURGICAL PROGRESS.

ABDOMEN.

I. A New Intestinal Suture. By Dr. EMMERICH ULLMANN (Vienna). A good method of intestinal suturing must fulfil two conditions; it shall insure a certainty that the suture will hold, and it shall be quickly applied. For a long time surgeons strove to accomplish the first condition, and as a result the Czerny-Lembert suture was evolved. Then failures were found to be due to the long duration of the operation. To overcome this a rapid circular suture of the resected intestine was practised, and such devices as the button of Murphy were invented. It has seemed to Ullmann that in these devices certainty has been sacrificed to quickness, and he has sought to find an operation combining the two essential conditions of perfection, and in which the whole operation can be carried out in a few minutes.

The method which he has adopted was first theoretically suggested by an Australian physician, Wydenham Munsell, but first performed by Ullmann upon a patient in December, 1894, after having practised it upon the cadaver and living animals. He has modified the operation so that it is done as follows:

A fixation suture is passed through the whole thickness of both of the divided ends at the insertion of the mesentery, the knot being tied on the inside. (Fig. 1, *b d*.) The same is done on the opposite side (*a c*), and then on the two lateral sides (*e f* and *g h*). Then with a cut of the scissors a longitudinal opening, five or six centimetres long, is made on the side opposite the mesentery in the afferent end of the intestine. Through this opening a pair of forceps is passed and the sutures grasped and drawn up. As this is done, the proximal end of the intestine becomes inverted and drawn through the wound.

(Fig. 2.) With this comes the distal end, so that both ends of the intestine are drawn through this opening (*m n*). The mucous membrane of the efferent end looks inward, and that of the afferent end looks outward. Between the two mucous membranes the peritoneum

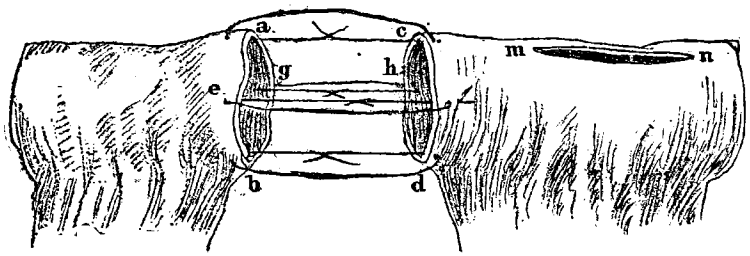

FIG. 1.

lies upon peritoneum. The four sutures are then drawn up and tied, dividing the circumference into four segments, so that the application of the other sutures is very easy. Two sutures can be applied at the same time by passing a needle straight through the four walls at a

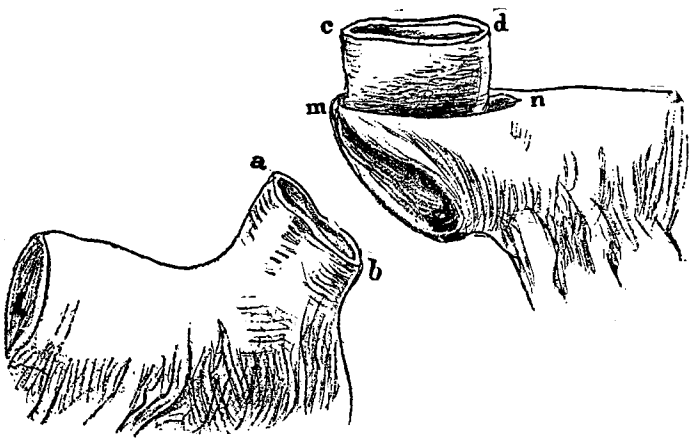

FIG. 2.

time, cutting in the middle and letting an assistant tie one side while the surgeon ties the other. These sutures are naturally tied on the inside, and the ends are closely cut. After the application of this series of interrupted sutures, the invaginated gut is drawn out again.

The longitudinal opening is then closed. Silk is used in the operation. The danger of invagination is prevented because the distal end is sewed into the proximal end.

Ullmann has performed this operation upon a woman, twenty-seven years of age, in whom he resected 174 centimetres of colon for carcinoma. The abdomen was closed without drainage. The wounds healed primarily without any disturbance.

He hopes that this operation will come into general use. Many will hesitate to adopt it because one simple row of sutures is used; others, because the sutures include all three of the coats of the intestine. To the first it may be said that a second series of sutures may

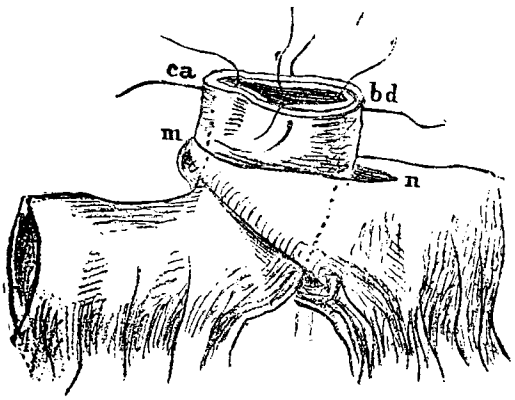

FIG. 3.

be applied to the serosa after the gut has been drawn out. This is certainly not necessary according to Ullmann. He lays great importance upon the fact that corresponding parts of the intestine are accurately brought together. In the other operations there is always some part that is more relaxed than the rest. As to the second objection, he claims that it makes no difference whether the mucosa is included in the suture or not. If the surgeon does not wish to include it, he can pierce only the muscularis and serosa, for the field of operation is so plainly in view and so perfectly under control that the mucosa can easily be omitted from the suture. It certainly seems that the second

objection is well taken. If the operation, as Ullmann performs it, stands the test of time, we shall have learned something in abdominal surgery and seen another of the bugaboos of infection disposed of.—*Centralblatt für Chirurgie*, No. 2, 1895.

II. A Contribution to the Technique of Intestinal Suturing. By Dr. LANDERER (Leipzig). The numerous recent modifications of the intestinal suture show the desirability of simplifying the operation. In strangulated gangrenous hernia, as well as in the resection for cancerous disease, the entire result may depend upon the perfection of the anastomosis, whether the operation takes ten minutes or an hour. In the case of feeble patients, a prolonging of the narcosis and the operation for half an hour may be the cause of death.

Of the many modifications of the intestinal suture (Neuber, Senn, Wölfler, Braun, Von Baracz, *et al.*), the button of Murphy seems to attract the greatest interest at the present time.

Although many good results have been reported in America and also in Germany, still, there have been some cases in which the button caused perforation and fatal peritonitis or intestinal obstruction. In the ANNALS OF SURGERY, of February, 1895, Dawbarn reported two cases of death from the use of Murphy's button, once from perforation and once from intestinal obstruction. He has also reported four cases in which the button was not passed along the canal, but was found in the intestine at the autopsy or at a second operation.

The objections to this button are its size and weight, which hinder its easy expulsion and passage along the intestinal canal, and the necessary necrosis of the clamped portion of intestine which renders perforation liable to occur. Another objection is that it is not always at hand and not easily obtained.

Landerer has invented the following method of quickly uniting the two ends of divided intestine without the dangers and objections inherent in this button of Murphy. As yet he has tried it only upon dogs and cadavers.

A cylinder is cut out of a potato or turnip. This cylinder is